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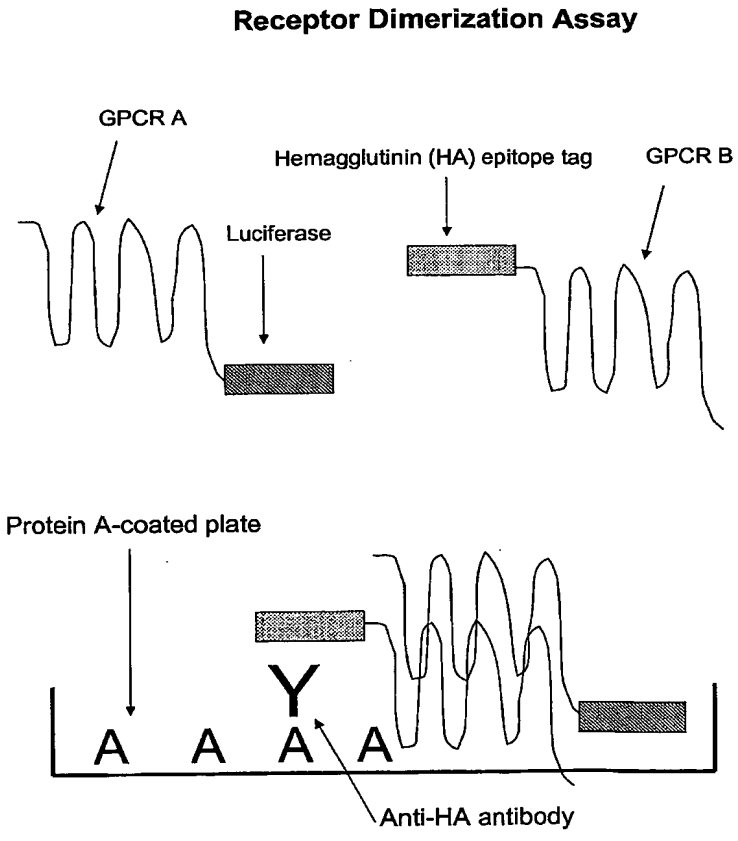
(54) Title: METHODS AND COMPOSITIONS RELATING TO MODULATION OF GPCR SIGNALING



(57) Abstract: The subject invention provides methods for detecting a GPCR-binding partner complex. In general, the methods involve co-producing two polypeptides, one of which being a GPCR, isolating one of the polypeptides using a substrate with affinity for that polypeptide, and directly detecting the presence of the other polypeptide on the substrate. In some embodiments, the affinity substrate is addressable. The two polypeptides may be the same or different GPCRs, or a GPCR and a non-GPCR polypeptide. The subject invention further provides methods for identifying whether a polypeptide is a binding partner for a GPCR. In addition, the subject invention provides methods of screening for agents that modulate the binding of a GPCR to a binding partner for that GPCR. The subject methods and compositions find use in a variety of research and therapeutic applications, particularly in methods to identify agents for treating GPCR-binding partner complex-related disorders.

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